

Modular Plant Licensing

Industry Meeting with NRC
May 22, 2002



Modular Plants

- Plants consisting of multiple reactor modules hold great promise for the future
 - Enhanced safety and reliability
 - Improved economics
 - Ability to add capacity incrementally according to market conditions
- Need to ensure that statutory and regulatory infrastructure is not unfair to modular plants



Objectives for Modular Plant Licensing

- Single NRC technical/safety review and single public hearing
- Approval to operate each module for 40-years
- Assessment of a single retrospective Price-Anderson premium
- Assessment of a single NRC annual fee



Integrated Approach

- Applicants would
 - Prepare a single FSAR covering all modules
 - Prepare a single Environmental Report (if an ESP is not referenced)
 - Simultaneously submit nearly identical COL applications for each module
- NRC would
 - Use existing authority under the AEA to subject the set of modular COL applications to a integrated technical/safety review and a single public hearing
 - Issue an integrated set of nearly identical COLs, one for each module



Integrated Approach (cont.)

- The set of modular COLs would authorize construction of all modules
- Modular COLs would identify the estimated completion date for each module as specified by the applicant per 10 CFR 50.33(h)
- Each COL would authorize operation after the module-specific 10 CFR 52.103(g) finding
- Pending legislation would allow module-specific 40-year license terms to commence with each 10 CFR 52.103(g) finding



Integrated Approach (cont.)

- Pending legislation would subject modular plants to a single Price-Anderson premium
- NRC has authority to assess a single annual fee to multi-module plants, even if each module is licensed separately



Design Approval Under a COL

- Regardless of licensing scenario, the SECY-01-0207 proposal for modular design re-reviews every five years is:
 - Unnecessary in light of the backfit rule (10 CFR 50.109)
 - Contrary to the intent that COLs resolve all safety issues and have a 40 year term
 - Adverse to Part 52 goal of standardization
- Duration of design approval embodied in a COL is coincident with the license term



Summary

- Integrated, multi-license approach recommended to achieve practical objectives for modular plant licensing
- Enabling legislation pending in Congress
 - Price-Anderson
 - Start of 40-year license term
- Modular COL embodies design approval for the term of the license

